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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,679	01/08/2002	Rita Lorena Salazar-Leal	214314US30	9035
22850	7590	03/01/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			SMALLEY, JAMES N	
			ART UNIT	PAPER NUMBER
			3727	

DATE MAILED: 03/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/038,679	SALAZAR-LEAL, RITA LORENA	
Examiner	Art Unit		
James N Smalley	3727		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 11 February 2005.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-4,6-14 and 19-25 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-4,6-14 and 19-25 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_.  
\_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 6-9, 11, 13-14 and 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Obrist et al. US 4,111,322 in view of Kamata et al. US 5,431,697.

Obrist '322 teaches a synthetic plastic cap (1) applied to a container (4), and comprising printing (9). In col. 2, lines 50-51, Obrist '322 teaches the cap "is secured by screw threading (not shown)." Obrist '322 does not teach forming the cap of plastic with admixed thermochromic materials.

Kamata '697 teaches a polymer resin comprising admixed thermochromic materials which displays a change in color with respect to temperature change, and discloses in col. 8 lines 55-57, "The resultant article can have a sophisticated, highly fashionable appearance." In col. 3, lines 12-62, Kamata '697 discloses the various olefin polymers, such as high and low density polyethylene and propylene and combinations thereof. Furthermore, Kamata '697 teaches, in each of the 5 examples, molding various plastic objects of the new polymer. Example 1 teaches a bath pail; example 2 teaches a cup; example 3 teaches a water bottle; example 4 teaches a tooth brush handle; example 5 teaches a sheet. Furthermore, the examples teach varying the color transition temperature threshold. Example 2 teaches turning from colorless to blue at 10 degrees C, meeting the most narrow claimed temperature range in claim 3. Example 3 teaches a 35% weight degree of crosslink. Example 3 further teaches a color transition from white to deep blue.

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Because Kamata '697 teaches forming various plastic articles from the material, and furthermore configuring the transition temperature, and display colors, forming the cap of Obrist '322 of the material disclosed by Kamata '697 is not found to be an unexpected result beyond ordinary experimentation, and would be well within ordinary skill.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the plastic closure cap of Obrist '322, forming it of the polymer taught by Kamata '697, motivated by the benefit of providing a sophisticated, highly fashionable appearance.

Examiner further notes that because Kamata '697 teaches varying the transition temperature, percent-weight composition ratios, and colors, varying all of these to a desired value or result are well within ordinary skill through routine experimentation. It has been held that discovering an optimum value of a result-effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Forming the cap of a mixture that would turn from white to deep blue, such as that taught by Example 3, motivated by the benefit of providing a sophisticated, highly fashionable cap, would result in the print being visible at a first temperature, and invisible at a second temperature. One would be motivated to make the cap switch from white to blue, to represent the colors of a particular logo, or trademark, for example.

Regarding claim 11, Obrist '322 teaches "Lemon Soda," which inherently comprises a carbonated beverage.

4. Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Obrist et al. US 4,111,322 in view of Kamata et al. US 5,431,697 as applied to claim 1 above, and further in view of Ohmi et al. US 5,769,255.

Obrist '322 is silent as to the sealing performance of the cap.

Ohmi '255 teaches a sealing liner insert (2) for threaded bottle caps, designed to promote "favorable sealing performance" (see Abstract).

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It would have been obvious to one having ordinary skill in the art to provide Obrist '322 with the liner taught by Ohmi '255, motivated by the benefit of providing means to promote favorable sealing performance.

5. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Obrist et al. US 4,111,322 in view of Kamata et al. US 5,431,697 as applied to claim 1 above, and further in view of Pariseau US 6,579,006.

Obrist '322 does not teach a thermochromic ink layer.

Pariseau '006 teaches a depression and ink layering comprising a non-thermochromic ink layer (12) and thermochromic material layers (14) and (16) configured to selectively display a message. One having ordinary skill would recognize the equivalence between "thermochromic materials" and thermochromic ink.

The device is disclosed as disposable on a "cap" (see col. 3, line 4; also see col. 4, line 55), and further teaches the device can be used "to indicate whether a retained product is hot, cold, or in between" (col. 9, lines 40-41). Examiner finally notes the surface of the depression onto which the ink is disposed can still be considered the "exterior" surface, as it faces ambient, and is not closed off by the container.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cap of Obrist '322, providing the depression and thermochromic ink layers taught by Pariseau '006, motivated by the benefit of indicating whether the retained product is hot, cold, or between.

#### ***Response to Arguments***

6. Applicant's arguments filed 11 February 2005 have been fully considered but they are not persuasive.

a) **Applicant asserts there is no suggestion on the record to combine Obrist '322 with Kamata '697.**

Examiner notes, "...[F]inding of obviousness does not require existence of express, written motivation to combine in prior art, since motivation to combine may be found in nature of problem to be

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solved, leading inventors to look to references relating to possible solutions to that problem." *Ruiz v. A.B. Chance Co.*, 69 USPQ2d 1686 (CA FC 2004). Novelty, by which the Examiner asserts is the reason to combine the references, does not exactly constitute a problem, as it is unlikely an inventor will suggest in their teaching that the invention should be modified to make it novel. However, the court ruling is relevant to the instant rejection, teaching one may draw motivation from sources other than "express, written motivation." It is the Examiner's contention that it is obvious and well known to form any object as a novelty object. Society is replete with novelty items, essentially standard objects provided with characteristics, such as color, to make them more appealing, desirable, and marketable. Kamata '697 teaches it is known to form a variety of objects from the admixed thermochromic material, thus making it more obvious to form a beverage container cap of such novel composition. See for example the drinking cup of Meyers et al. US 6,513,379, teaching a child container formed of an admixed thermochromic material. It is the Examiner's contention that the motivation to combine these references, if not on the record, is provided by ordinary skill in the art outside of the record.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

**b) Applicant argues Obrist '322, Kamata '697, and Ohmi '255 do not teach a two-piece cap.**

Examiner notes the liner of Ohmi, applied to claim 12 as a seal, also meets the limitation of claim 10, limiting the cap to more than one piece, because it comprises the second piece, with the cap of Obrist being the first piece.

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**Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James N Smalley whose telephone number is (571) 272-4547. The examiner can normally be reached on M-Th 9-6:30, Alternate Fri 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lee Young can be reached on (571) 272-4549. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jns

*lwy*  
*32885*  
LEE YOUNG  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700